

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 10/720,313 | 11/24/2003 | Peter Bernhardt | TRW(EHR)6873 | 4296 |
| 7590 02/14/2005 | | | EXAMINER | |
| TAROLLI, SUNDHEIM, COVELL, | | | FERGUSON, MICHAEL P | |
| TUMMINO & SZABO L.L.P. 1111 LEADER BLDG. | | | ART UNIT | PAPER NUMBER |
| 526 SUPERIOR AVENUE CLEVELAND, OH 44114-1400 | | | 3679 | |
| | | | DATE MAILED: 02/14/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| Office Action Summany | 10/720,313 | BERNHARDT ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Michael P. Ferguson | 3679 |
| The MAILING DATE of this communication Period for Reply | n appears on the cover sheet with | the correspondence address |
| A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicatic - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory p - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | ON. FR 1.136(a). In no event, however, may a reply on. , a reply within the statutory minimum of thirty (3 period will apply and will expire SIX (6) MONTHS statute, cause the application to become ABAN | be timely filed 0) days will be considered timely. 5 from the mailing date of this communication. DONED (35 U.S.C. § 133). |
| Status | | |
| Responsive to communication(s) filed on 2a) This action is FINAL. 2b) Since this application is in condition for all closed in accordance with the practice un | This action is non-final. lowance except for formal matters | • |
| Disposition of Claims | | |
| 4) Claim(s) 1-3 is/are pending in the applicate 4a) Of the above claim(s) is/are with 5) Claim(s) is/are allowed. 6) Claim(s) 1-3 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction at a subject to | hdrawn from consideration. and/or election requirement. miner. is/are: a)⊠ accepted or b)□ ole of the drawing(s) be held in abeyance | See 37 CFR 1.85(a). |
| 11) The oath or declaration is objected to by the | | • |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International Both * See the attached detailed Office action for a | ments have been received. ments have been received in App priority documents have been recurred pureau (PCT Rule 17.2(a)). | lication No ceived in this National Stage |
| Attachment(s) 1) \(\sum \) Notice of References Cited (PTO-892) 2) \(\sum \) Notice of Draftsperson's Patent Drawing Review (PTO-94) | 4) Interview Sum | mary (PTO-413) lail Date |
| Notice of Dransperson's Patent Drawing Review (PTO-94) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date <u>05/03/04</u>. | | mal Patent Application (PTO-152) |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) JE

Application/Control Number: 10/720,313

Art Unit: 3679

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

Claim 1 (line 3) recites "between these". It should recite --between said housing and said ball pin--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi et al. (US 4,967,609).

As to claim 1, Takagi et al. disclose a ball joint comprising a housing 5, a ball pin 6 and a sealing bellows 1 which lies against the housing and the ball pin in order to seal between the housing and the ball pin, characterized in that the housing has a cylindrical section with a holding surface against which a sealing surface 2 of the bellows lies (Figure 1).

As to claim 2, Takagi et al. disclose a ball joint characterized in that the cylindrical housing section adjoins a curved housing section and is separated therefrom by a step in the housing **5** (Figure 1).

Application/Control Number: 10/720,313

Art Unit: 3679

As to claim 3, Takagi et al. disclose a ball joint characterized in that a middle section of the sealing bellows 1 lies against the curved housing section and is retained by an

interlocking fit (Figure 1).

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Lavery et

al. (US 6,439,795).

As to claim 1, Lavery et al. disclose a ball joint comprising a housing 20, a ball pin 14 and a sealing bellows 30 which lies against the housing and the ball pin in order to seal between the housing and the ball pin, characterized in that the housing has a cylindrical section with a holding surface against which a sealing surface 36 of the

bellows lies (Figure 7).

As to claim 2, Lavery et al. disclose a ball joint characterized in that the cylindrical housing section adjoins a curved housing section and is separated therefrom by a step in the housing (Figure 7).

As to claim 3, Lavery et al. disclose a ball joint characterized in that a middle section of the sealing bellows **30** lies against the curved housing section and is retained by an interlocking fit (Figure 7).

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to ball joints:

Art Unit: 3679

Wasada (US 5,100,254) and Brueggen et al. (US 5,466,084) are cited for pertaining to ball joints comprising a housing having a cylindrical section against which a sealing surface of a sealing bellows lies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (703)308-8591. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703)308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

02/07/05

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

aniel P Stocker